



**Digital Housing**  
i n s t r u c t i o n   m a n u a l

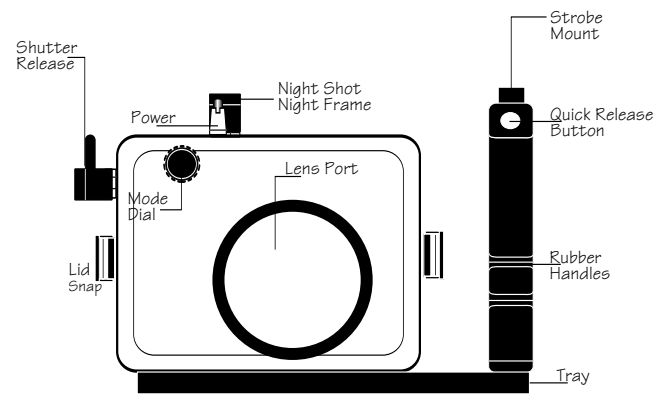
for  
**Sony**  
**DSC-V1**

Housing  
**#6110.91**

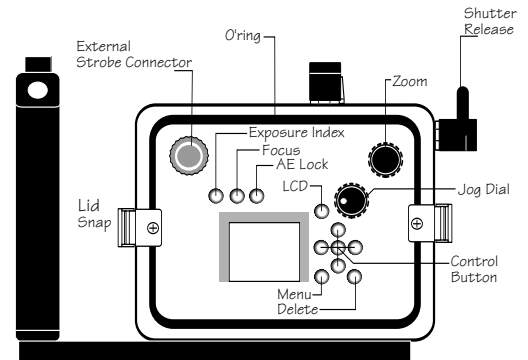
# Ikelite Digital Housing

instruction manual

Housing #6110.91 for Sony DSC-V1



FRONT VIEW



BACK VIEW

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Congratulations on your purchase of an Ikelite Digital Camera Housing. Ikelite has over 30 years of experience in the underwater photographic and lighting market. Our products are designed and built in the USA by Ikelite for both the professional and amateur photographer.

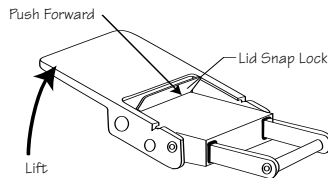
The clear housing permits instant visual inspection of the camera and all sealing surfaces as well as complete monitoring of controls and camera LCD screens.

Ikelite Digital Housings are slightly negative in salt water for stability. This housing has been water pressure tested at the factory. Housing is pressure tested to 200' (60m).

## Opening the Housing

Lid Snaps have a **Lock**. To open, push Lid Snap Lock forward and lift as shown. Keep pressure on the Lid Snap so it does not fly open quickly.

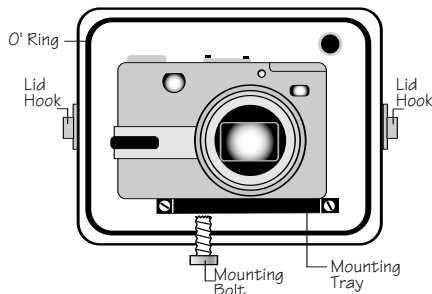
*Some lid snaps have a lot of spring tension once they go over center, have a firm grip on the lid snap. Lid Snaps may be opened one at a time.*



## Installing the Camera

Install a fully charged battery into the camera before securing the camera to the housing's mounting tray.

Remove the back from the housing. The mounting tray for the camera is secured to the housing back. Position the camera on the tray and secure it with the mounting bolt which threads into the camera's tripod socket.

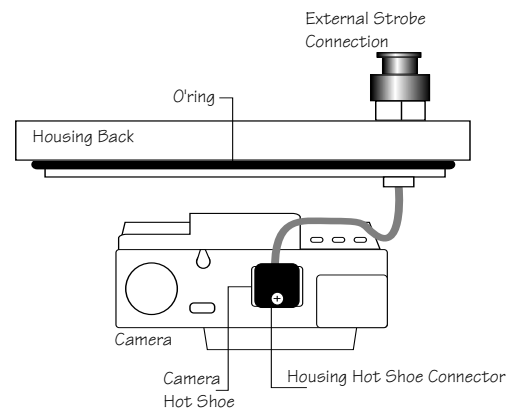


### CAUTION:

Some camera tripod socket threads are plastic. The mounting bolt is metal. Do not cross thread or over tighten as you may damage the camera tripod socket threads.

## Flash Connection

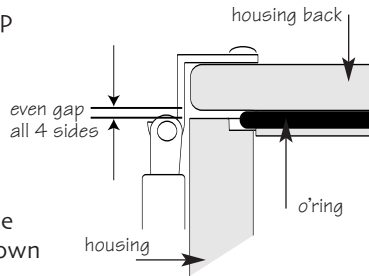
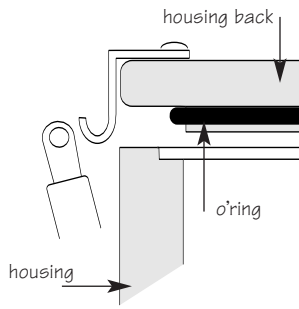
When using an external strobe connect the housings Hot Shoe Connection, slide the connector into the hot shoe of the camera from the back as shown. Slide the connector forward until it stops. This can be done after the camera is mounted to the mounting tray.



Only remove the External Strobe Connector's waterproof cap when a sync cord is going to be connected.

## Closing the Housing

1. Place housing face down in your lap.
2. Check to see that there is an o'ring on the housing back and that it is clean and in its proper location.
3. Guide the back onto the housing. The o'ring should touch the housing all the way around. There should be an even gap all the way around between the housing and the housing back.
4. Lift the lid snaps so they are extended and place the lid snap into the hook on the housing back.
5. To close the housing push down on the lid snaps until they snap into place. Lid snaps on opposite sides of the housing should be closed at the same time. Be sure they are down far enough to engage the lock.



**Double check** - Once the housing is closed, check the o'ring seal.

Check the gap between the housing back and the housing, it should be even all the way around.

Look through the clear plastic back at the o'ring. You should see a darkened area where the o'ring is compressed against the housing back. If you do not see an even black compression seal all the way around the back, open the lid snaps, reseal the housing back and close the lid snaps. Visually check the seal again.

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## Checking Controls

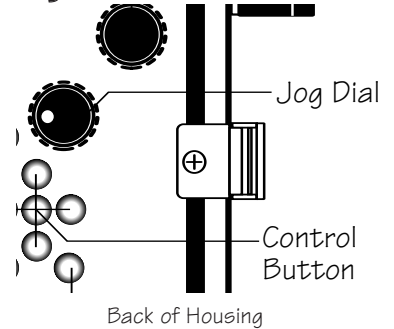
Once the housing has been closed, push the controls back into place. Make sure they line up with the camera's controls.

## Turn Camera On

Turn the camera on and operate each of the housing controls to get a feel for using the camera in the housing. Take a few pictures above water with the camera in the housing.

## Jog Dial Control

The housing's Jog Dial Control has a small bump on the inside face of the control for depressing the Jog Dial on the camera. The small bump is in the same location as the white dot on the control knob. To use, rotate the control knob until the white dot is in the 9 o'clock position. In this position the small bump will depress the Jog Dial.



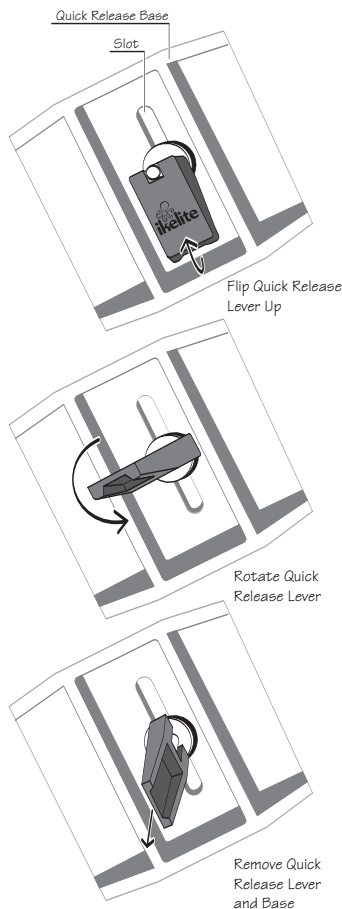
To select an item turn the jog dial to the item you want to set. Then pull out on the control slightly and position the white dot over the jog dial and depress. This will set the item you selected.

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## Quick-Release Base, Handles and Tray

### Quick-Release Base

The Quick-Release Base is plastic. A toggle lever located underneath the base allows the base to be easily removed from the Tray. Turn the housing upside down, pull out on the toggle lever. Rotate the lever 90° to remove the base.



### Handles and Tray

The housing handles are rubber and the tray is aluminum. Their weight helps to offset the buoyancy of the housing. The complete assembly is slightly negative underwater for better control. The handles have a push button release for easily attaching and removing strobe arms. The tray and handles can be removed from the housing. To remove the tray, the base must be removed to gain access to the nuts holding the tray on the housing. Remove the 2 nuts, washers and rubber spacers. **DO NOT remove the bolts protruding through the housing.**

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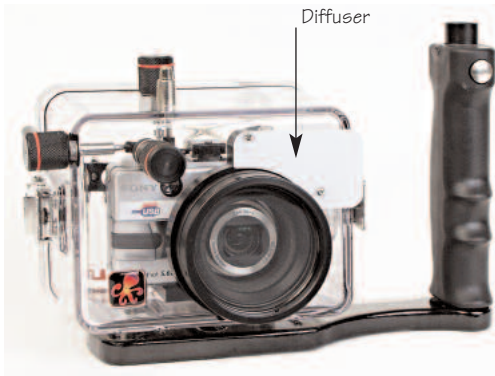
## Lubricants

1. Ikelite provides silicone lubricant with the housing. We recommend that you use only Ikelite lubricant on Ikelite products as some other brands may cause the o'ring to swell and not seal properly.
2. Use only enough lubricant to lightly cover control shafts and o'rings. Wipe off any excess lubricant with a clean cloth. Lubricant is not a sealant, it is used to reduce friction. Excessive lubricant can collect sand and dirt which may interfere with proper sealing.

### CAUTION

**Never use spray lubricants as the propellant ingredient can cause the plastic housing to crack.**

## Diffuser and Deflector Installation



Housing shown with diffuser installed.

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## Lens Port

The Lens Port is factory sealed, do not remove. Treat the glass in the lens port as a camera lens. After use, rinse and gently dry the lens port to avoid water spotting. To clean use a mild soap solution or lens cleaner.

*Do not use alcohol or window cleaner on the Lens Port.*

The Lens Port is threaded so that accessory lenses may be screwed onto the port. The threads are very fine, take care not to cross thread the lens.

Wide angle lenses are available from Inon, Sea & Sea and Epoque.

These lenses can be screwed onto the lens port above or below water. These lenses are designed to have water between the front of the port and the accessory lens. Make sure no air bubbles are trapped between the port and the accessory lens. There may be slight vignetting when these wide angle lenses are installed. Any vignetting that occurs can be eliminated by zooming the camera lens slightly. The camera's built-in flash cannot be used with wide angle lenses. The front of the lenses are so large they block the camera's flash. To properly light subjects when using a wide angle lens an external strobe should be used. Due to the wide angle of coverage of these lenses, the DS125 Substrobe is recommended or two DS51 Substrobes.



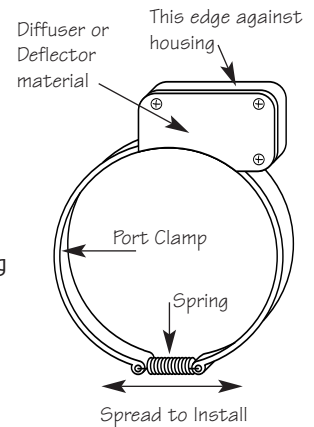
Housing shown with accessory wide angle lens.

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## Diffuser and Deflector cont.

A diffuser and deflector are included with the housing. The diffuser is white transparent plastic. The deflector is also white but is not transparent and has a decal on the front.

To install the diffuser or deflector spread the port clamp at the spring end and slide over the lens port. The white plastic should be placed in front of the camera flash. The port clamp should be pushed back against the front of the housing.



## Diffuser

The diffuser should be installed when using the camera's built in flash. When shooting with the camera's built-in flash at approximately 2 feet (0.6 m) or less, zoom the lens to maximum telephoto. The lens port on the housing blocks a portion of the light from the camera's built-in flash when shooting close up. If you do not zoom to maximum telephoto, a shadow may appear in the lower left corner of close-up photographs. (*You can test this above water*)

## Deflector

The deflector should be installed when using an external strobe such as the DS51 or DS125 Substrobe and EV-Controller in the slave mode. The deflector will redirect the camera's flash to the EV-Controller which controls the external strobe.

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## Maintenance

The Ikelite Digital Housing should be given the same care and attention as your other photographic equipment. In addition to normal maintenance we recommend that the housing be returned to Ikelite periodically to be checked and pressure tested.

1. **Do Not** leave the camera and housing in direct sunlight for prolonged periods. Heat may damage the camera.
2. **Do Not** ship the camera in the housing.
3. Before using the housing, always check the tightness of the **set screw** in each control knob. Check each **control gland** penetrating the housing to make sure they are tight. There is a slight chance that either could vibrate loose during travel.
4. Keep the back o'ring clean and lightly lubricated. To lubricate remove the o'ring from the back. Put a small amount of Ikelite lubricant on your fingers. Draw the o'ring through your fingers to apply a light coating of lubricant. Only apply enough lubricant to make the o'ring feel slick. **Do Not stretch the o'ring.** This light coating of lubricant will help to keep the o'ring from drying out and will help to show a dark sealing line when the housing back is properly sealed.
5. Keep the area where the o'ring fits and the sealing surface of the housing clean.
6. Rinse the housing exterior thoroughly in fresh water after each salt water use. Dry with a soft cloth. Dry lens port to eliminate water spotting. After several uses in salt water soak the housing in a mild soap solution, rinse and dry before storage. When storing the housing, remove the back o'ring, lightly lubricate and place in a plastic bag. Place the plastic bag with o'ring inside the housing for safe keeping.

### CAUTION

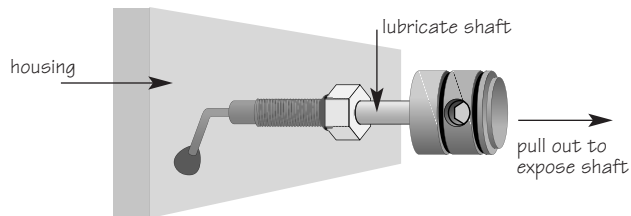
**Never use spray lubricants as the propellant ingredient can cause the plastic housing to crack.**

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## Control Maintenance

Ikelite controls are designed to provide years of reliable service with minimal maintenance.

1. Push button controls require no maintenance other than rinsing in fresh water after saltwater use. If a push button control becomes difficult to push or if it sticks when depressed, soak the housing in luke warm fresh water. After a few minutes operate the push button. If this does not correct the problem, return the housing to Ikelite for maintenance.
2. Some of the controls have long shafts. These controls can be

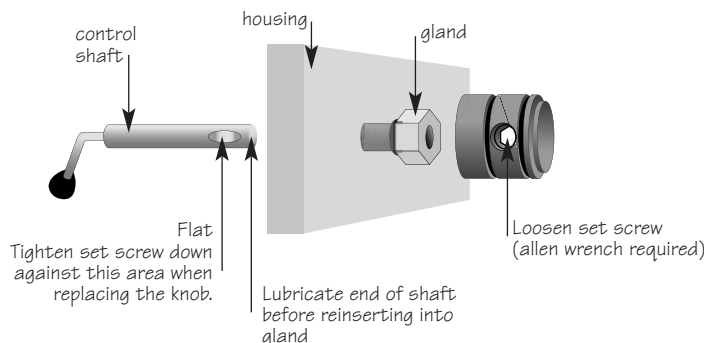


pulled out, exposing the shaft (see drawing).

To lubricate the control, gently pull on the knob until the stainless steel shaft is exposed. Lightly lubricate the shaft, then move the shaft in and out several times. This will lubricate the x'ring in the Ikelite control gland. This should be done before using the housing after a prolonged storage period, or once a week when the housing is in use.

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3. Some of the controls have a short shaft and cannot be pulled out exposing the shaft for lubrication. In the unlikely event one of these controls sticks or becomes difficult to operate you can remove the control from the housing and lubricate it, or return the housing to Ikelite for maintenance. To remove the control, loosen the set screw in the knob (allen wrench required); remove the knob. If there is salt or dirt build-up on the exposed control shaft, clean the shaft. Open the housing and gently slide the control shaft out of the control gland. Clean and lightly lubricate the shaft, including the end of the shaft. Slide the shaft back into the control gland and gently slide it back and forth a few times without fully removing the shaft from the gland. Replace the knob, NOTE the flat area on the shaft, the set screw in the knob should tighten down against the flat area on the control so the knob does not turn on the shaft.



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## Optional Accessories

### Back O'ring #0110

O'rings last for several years if properly maintained. (See Maintenance) Always carry a spare o'ring in case the housing o'ring becomes damaged or lost.

### UR/Pro Filter #6441.41

## External Flash

### Using DS Substrobes with the EV-Controller.

The Ikelite EV-Controller provides 10 manual power settings in half-stop increments with the DS51 or DS125 Substrobes. The EV-Controller can be triggered by the camera's built-in flash or the optional #4103 sync cord attached to the housing bulkhead.

External strobes expand lighting options to achieve the best lighting for different subjects. A second external digital strobe package can be added to fill shadows and produce more realistic photographs.

### Using Ikelite Substrobes with Sync Cords.

Any Ikelite Substrobe, Substrobe 50, Substrobe DS51, Substrobe 100, Substrobe DS125 or Substrobe 200 can be connected to the housing and used in the manual mode with the #4103 sync cord.



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## Photo Tips

1. The number one rule in underwater photography is eliminate as much water between camera and subject as possible. Get as close as you can to the subject, then use the zoom. If you are using flash, subjects beyond 6 feet (1.8m) will not have much color.
2. If the camera's built-in flash is being used it is very close to the camera lens. The flash will light up any suspended particles in the water and they will be recorded in your picture. This effect is called backscatter. To eliminate as much backscatter as possible, photograph close. Photograph in clear water; do not stir up the sand or silty bottom. If backscatter becomes a problem in the environment you are photographing, an external flash will help eliminate much of the backscatter.
3. Digital cameras have a slight lag time between when you press the shutter release button and the camera actually takes the picture. Hold the camera steady a second or two after pressing the shutter release button.
4. Do not shoot down on subjects as they will quite often blend into the background and be difficult to see in the photograph. Shoot subjects straight on or shoot up at a slight angle using the blue water as a contrasting background.
5. Underwater flash is used to restore the warmer colors filtered out by the water as well as to illuminate the subject. When photographing underwater, set the camera to use flash on every shot. If the camera's flash is set to AUTO and the sun is behind your subject, the camera may see enough light that it does not fire the flash. With the sun behind the subject the subject is shaded (dark) and needs flash for a good exposure.

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## General Tips

1. Due to the power required to operate the camera, flash, and LCD screen it is a good idea to start each dive with a fresh batteries.
2. Some cameras reset their flash to AUTO when the camera is turned on. If you prefer another setting be sure to select it.
3. As soon as you enter the water, take a moment and check the housing to see that it is properly sealed.
4. Next, check to see if there are any bubbles on the face of the lens port. If there are, take your finger and remove them. If there are bubbles on the lens port they can produce soft focus spots in your photographs.

## Ikelite Limited Warranty

All Ikelite products are warranted against any manufacturing defects for a period of one (1) year from the date of purchase. Defective products should be returned prepaid to Ikelite. Ikelite will, at its discretion, repair or replace such products, and will return to customer prepaid. All other claims, of any nature, including but not limited to bulb failure are not covered. Except as mentioned above, no other warranty expressed or implied, applies to this Ikelite product.

## Returning Products for Service

Ikelite is most interested in performing any service to assure that all products perform as intended. For repair or service, return the product to the address below with your name, address, phone number and a brief description of the problem. Evidence of purchase date must be provided to obtain warranty service.

**Ikelite Underwater Systems**  
50 W 33rd Street • Indianapolis, IN 46208 USA  
317-923-4523 • email: [ikelite@ikelite.com](mailto:ikelite@ikelite.com)  
[www.ikelite.com](http://www.ikelite.com)

Digital 6110.91-01-1003